

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**14**

**DECISION**

**TOPIC**

**Contract - University Hygienic Laboratory (UHL) for impaired waters  
monitoring and assessment**

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The Department requests Commission approval of a contract for the amount of \$251,133 with the University Hygienic Laboratory. The contract covers a variety of water monitoring and assessment activities related to the development of restoration plans for impaired water bodies. These activities are designed to obtain specific information needed to better define the impairments through the stressor identification process, and for the development of water quality restoration plans or Total Maximum Daily Loads (TMDLs). Site specific data are needed to better define the impairments and identify pollutant loads or other non-pollutant based stressors, such as habitat alteration that contribute to the impairments. The data collected under this contract will help technical staff make these determinations. The contract period is from June 5, 2007 – June 30, 2008.

In this contract, UHL will collect data for 8 lakes and 13 stream segments that have been prioritized for TMDL development. Various types of stream monitoring and assessment activities will be conducted, including: biweekly and storm event sampling for conventional and toxic water quality parameters; continuous monitoring of dissolved oxygen and water temperature; surveys of benthic macroinvertebrates and fish; stream flow measurement; physical habitat assessment; sediment and water contaminant screening. Lake sampling will include the collection of 2 additional samples per lake during the summer period (to be added to the ambient water monitoring schedule). Samples will be analyzed in the laboratory for a suite of water quality parameters and trophic state indicators such as nitrogen, phosphorus, suspended solids, and turbidity. A vertical depth profile of dissolved oxygen, pH, specific conductance, and water temperature will also be obtained on each sampling occasion. Federal funding for this contract is provided through Section 319 of the Clean Water Act.

Mary Skopec  
Section Supervisor  
Water Monitoring and Assessment  
Iowa Geological Survey and Land Quality Bureau IGSLQ Bureau  
Environmental Services Division

May 14, 2007

<b>Monitoring Costs By TMDL Waterbody - FY08</b>	
	<b>Variable Cost</b>
<b>Buttermilk Creek</b>	
Bi-weekly monitoring (2 sites)	\$25,151
Event Monitoring (1 Site)	\$9,146
Biomonitoring (2 sites)	\$6,183
<b>Long Dick Creek</b>	
Bi-weekly monitoring (2 sites)	\$21,652
Event Monitoring (2 Site)	\$22,776
Biomonitoring (2 sites)	\$6,199
Datalogger Monitoring (2 sites 3 deploys)	\$8,536
<b>Walnut Creek</b>	
Biomonitoring (2 sites, 3 RPBs)	\$8,428
<b>Marrowbone Creek</b>	
Biomonitoring (2 sites)	\$6,963
Dataloggers (2 sites)	\$4,011
<b>Lime Creek</b>	
Biomonitoring (2 sites)	\$6,523
Mussel Surveys (2 sites)	\$815
<b>Tetes Des Morts Creek</b>	
Biomonitoring ( 2 sites, 2 RPBs)	\$6,408
<b>Farmer's Creek</b>	
Biomonitoring (1site, 4 RPBs)	\$4,218
<b>Miner's Creek</b>	
Biomonitoring (1 site)	\$3,909
<b>North Cedar Creek</b>	
Biomonitoring (2 sites)	\$6,466
<b>East Pine Creek</b>	
Biomonitoring (1 site)	\$3,476
<b>Dry Run Creek</b>	
Bi-weekly Monitoring	\$18,468
Event Monitoring	\$3,600
<b>Yellow River</b>	
Bi-weekly Monitoring (1 site)	\$6,468
Event Monitoring (1 site)	\$1,800
Biomonitoring (1site, 4 RBP)	\$3,383
Datalogger (1 site)	\$3,450
<b>Hecker Creek</b>	
Bi-weekly Monitoring (1 site)	\$6,468
Event Monitoring (1 site)	\$1,800
Biomonitoring (2 sites)	\$5,198
Datalogger (1 site)	\$938
<b>Lakes Monitoring</b>	\$15,101
<b>Major Equipment</b>	\$7,000
<b>Miscellaneous Supplies/Small Equipment</b>	\$6,000
<b>Shipping</b>	\$2,000
Sub-total	\$240,849
F&A (8%)	\$18,602
<b>Total</b>	<b>\$251,133</b>



